

Abstract

The invention relates to an apparatus for determining and/or monitoring volume- and/or mass-flow of a medium (3) flowing through a pipeline (2) in a stream direction (S).

The apparatus includes: At least two ultrasonic sensors (16, 17), which are secured in a defined measuring positional relationship on the outer wall of the pipeline (2) and alternately emit and receive ultrasonic measuring signals; and a control/evaluation unit (22), which determines volume- and/or mass-flow of the medium (3) in the pipeline (2) on the basis of the travel time difference of ultrasonic measuring signals in the stream direction (S) and opposite to the stream direction (S).

For assuring rapid mounting and demounting of the ultrasonic flow measuring device (1) on a pipeline (2), the at least two ultrasonic sensors (16, 17) are secured on a pliers-like clamping unit (4), which is embodied in a manner such that the ultrasonic sensors (16, 17) are bringable into the measuring positional relationship by simple clamping onto the pipeline (2).

(Fig. 1)